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HARNESS	, DICKE	Y & PIERCE, P.L.	SPOONER, I	SPOONER, LAMONT M			
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Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		09/652,035	BABST ET AL.	·		
Office Action Sum	mary	Examiner	Art Unit			
		Lamont M. Spooner	2654			
The MAILING DATE of this Period for Reply	communication app	ears on the cover sheet with the	correspondence ad	ldress		
A SHORTENED STATUTORY P WHICHEVER IS LONGER, FRO Extensions of time may be available under the after SIX (6) MONTHS from the mailing date If NO period for reply is specified above, the Failure to reply within the set or extended pe Any reply received by the Office later than the earned patent term adjustment. See 37 CFF	M THE MAILING DA ne provisions of 37 CFR 1.13 of this communication. maximum statutory period w riod for reply will, by statute, ree months after the mailing	ATE OF THIS COMMUNICATION  (6(a). In no event, however, may a reply be for a simply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	ON. imely filed m the mailing date of this co IED (35 U.S.C. § 133).			
Status						
	2b)☐ This condition for allowar	ovember 2005. action is non-final. ace except for formal matters, p ox parte Quayle, 1935 C.D. 11, 4		e merits is		
Disposition of Claims						
4) ⊠ Claim(s) <u>1-78</u> is/are pendin 4a) Of the above claim(s) _ 5) □ Claim(s) is/are allow 6) ⊠ Claim(s) <u>1-78</u> is/are rejecte 7) □ Claim(s) is/are object 8) □ Claim(s) are subject	is/are withdraw ed. d. xted to.					
Application Papers						
	August 2000 is/are: t any objection to the c ) including the correcti	a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. So on is required if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CF	FR 1.121(d).		
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) \( \sum \) Notice of References Cited (PTO-892)  2) \( \sum \) Notice of Draftsperson's Patent Drawing		4) Interview Summar Paper No(s)/Mail [ 5) Notice of Informat	Date	) 152)		
<ol> <li>Information Disclosure Statement(s) (PT Paper No(s)/Mail Date</li> </ol>	U-1449 or PTO/SB/08)	5)  Notice of Informal 6)  Other:	ratent Application (PTC	J-152)		

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### **DETAILED ACTION**

## Response to Arguments

- The Examiner acknowledges the Supplemental Declaration submitted March 17,
   2005.
- 2. Applicant's arguments filed 11/02/05 have been fully considered but they are not persuasive.

In response to applicant's arguments, p.16, "The Steele '342 patent fails to teach... "determining whether or not the plurality of symbols include a sequence of symbols dependent upon at least one other symbol" as well as "morphing a stored word corresponding to a symbol sequence including the at least one other symbol. "The Examiner cannot concur. As the applicant acknowledges, p.16. "the system does appear to recognize which symbol corresponds to the subject and which symbol corresponds to the verb..." Steele teaches, C.3.lines 48-59-having a symbol sequence, which is on a syntactic axis, and dependencies. In C.4.lines 45-54-"two or more adjacent icons" explicitly and inherently define that the syntactical analysis which depends on a dependent symbol in a symbol sequence, not limited to a total of two symbols (i.e. Fig. 3 item 12 b), furthermore, morphing a stored word corresponding to a symbol sequence including the at least one other symbol, Figs. 12a-c-teaches of the syntactical analysis which depends upon the dependent symbol sequence, Input, Parser, Output:tree-structured parse, to produce at least one modified form of the stored word, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a

grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c, C.3.lines 48-59-his Mary saw father, and Fig. 12 b. his "man drink tea" as it relates to the syntactical analysis and dependent symbol of a sequence" as in the about, "the chef pours..."

In response to applicant's arguments, pp.18, 19, "there clearly not mention of displaying a plurality of selectable words, and then subsequently displaying morphs of the selected words for further selection. The Examiner cannot concur. In col. 8, lines 20-65, "set selector finds a set... to display. Display gets the set data for display... Member selector stores the word text for inflection and/or output and copies the inflect and endings data to display... When set selector selected a set, display... use to the inputs to obtain the inflections and endings for selected words."

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-39, and 55-75 are rejected under 35 U.S.C. 102(b) as being anticipated by Steele et al. (Steele, 5,169,342).

As per claims 1, 14, 27, Steele discloses a method comprising:

receiving input of a plurality of symbols (Fig. 13g);

determining whether or not the plurality of input symbols include a sequence of symbols dependent upon at least one other symbol (c.3.line 48-59-"syntactic axis".

c.4.lines 45-54-"two or more adjacent icons"-meaning the icons are dependent upon another icon in order to determine syntactical information, Figs. 12a-c-teaches of the syntactical analysis which depends upon the dependent symbol sequence); and morphing a stored word corresponding to a symbol sequence including the at least one other symbol (Figs. 12a-c-teaches of the syntactical analysis which depends upon the dependent symbol sequence, Input, Parser, Output:tree-structured parse), to produce at least one modified form of the stored word (c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per claims 2, 15, 24 and 28, Steele discloses all of the limitations of claim 1, upon which claim 2 depends. Steele further discloses:

the symbols are input by actuation of corresponding keys on a keyboard (c.3.lines 20-27, Fig. 1-screen keyboard, icons are the symbols inputted).

As per claims 3 and 29, Steele discloses all of the limitations of claim 1, upon which claim 3 depends. Steele further discloses:

storing words in a database corresponding to symbol sequences (c.12.lines 40-42).

As per **claims 4, 16 and 30**, Steele discloses all of the limitations of claim 3, upon which claim 4 depends. Steele further discloses:

the database also includes morphing codes (c.3.lines 57-59-his syntactic rules), stored in association with the words and used in morphing the stored words (ibid, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per claims 5, 17 and 31, Steele disclose all of the limitations of claim 4, upon which claim 5 depends. Steele further disclose:

the morphing codes indicate a part of speech of the stored words (Fig. 12a).

As per **claims 6, 18, and 32**, Steele disclose all of the limitations of claim 5, upon which claim 6 depends. Steele further disclose:

the stored word is morphed in a manner dependent upon the part of speech of the stored word (Fig. 12a-c, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per claims 7, 19 and 33, Steele discloses all of the limitations of claim 1, upon which claim 7 depends. Steele further discloses:

the stored word is morphed in a manner dependent upon the part of speech of the stored word (c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a

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grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per claims 8, 20, 21 and 34, Steele discloses all of the limitations of claim 1, upon which claim 8 depends. Steele further discloses:

the symbols include pictorial (Fig. 13g) illustrations.

As per claims 9, 22, and 35, Steele disclose all of the limitations of claim 1, upon which claim 9 depends. Steele further disclose:

accessing a stored word corresponding to a sequence of the plurality of input symbols, in response to determining that the plurality of input symbols did not include a dependent sequence c.3.line 55-c.4.lines 17-his icon image sequence, and paradigmatic stored choices, the paradigmatic choices are determined not to include a dependent symbol sequence, as in they specify what can replace-interpreted as independent, as the syntactical rules specify what may follow-interpreted as dependent)

As per **claims 10, 23 and 36**, Steele discloses all of the limitations of claim 1, upon which claim 10 depends. Steele further discloses:

replacing a dependent symbol sequence with the at least one other symbol, in response to determining that the plurality of input symbols included a dependent sequence (c.4.line 54-c.5.line 8), wherein

a stored word corresponding to a symbol sequence including the substituted at least one symbol is morphed (ibid, c.9.lines 25-40, Fig. 12a-c, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence

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including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c, the Examiner interprets the syntactical rules to apply to the entire Invention disclosed by Steele, to include the replaced symbol sequence, and morphing of a word corresponding to a symbols sequence).

As per **claims 11 and 37**, Steele disclose all of the limitations of claim 10, upon which claim 11 depends. Steele further disclose:

storing words in a database corresponding to symbol sequences (c.12.lines 40-42).

As per **claims 12, 25 and 38**, Steele discloses all of the limitations of claim 11, upon which claim 12 depends. Steele further disclose:

the database also includes morphing codes (c.3.lines 57-59-his syntactic rules), stored in association with the words and used in morphing the stored words (c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 13, 26 and 39**, Steele disclose all of the limitations of claim 12, upon which claim 13 depends. Steele further disclose:

the morphing codes indicate a part of speech of the stored words (Fig. 12a).

As per claims 55, 60-62, 67-69, 74 and 75, Steele and further discloses, wherein the dependent sequence of symbols does not include a word corresponding thereto

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(see dependent claims, i.e.claim 1 for dependent symbol sequence discussion, none of the sequences include the word "Jump");

wherein at least one symbol of the dependent sequence does not have a word corresponding thereto (ibid);

As per **claims 56, 63, and 70**, Steele further discloses at least one symbol in the dependent sequence is polysemous (Fig. 12a, b-"drink").

As per claim 57, 58, 64, 65, 71, and 72, Steele further discloses, wherein at least one symbol in the dependent sequence dictates a type (verb tense, see claim 1, pour(s) as present tense, as it relates to "man drink tea")of morphing to be done to a stored word);

As per claims 59, 66, and 73, Steele further discloses wherein the dependent sequence of symbols includes at least one symbol only selected to control morphing (see claim 1, inherent to selection of a symbol sequence, wherein, C.3.line 60-C.4.line 17, the verb icon is controlled by syntactic analysis, and controls morphing, as it is placed in accordance with the syntactic rules, in a specified sequential structure.)

5. Claims 40-54, and 76-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman (5,649,223).

As per **claims 40, 45 and 50**, Freeman discloses a word prediction method comprising:

displaying a plurality of selectable words beginning with an input character, in response to receipt of the input character (C.8.lines 20-25-"set selector...single inputs", C.10.lines 1-10);

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determining whether or not morphing data is stored in association with a selected word, in response to receiving selection of a displayed word (c.8.lines 35-43-his words are searched for possible inflections);

morphing the selected word in response to determining that morphing data is stored in association with the selected word (c.8.lines 53-55); and

displaying morphs of the selected word for further selection (ibid).

As per **claims 41, 46 and 51**, Freeman discloses all of the limitations of claim 40, upon which claim 41 depends. Freeman further discloses:

storing words, and morphing data in association with at least one of the words, in a database (abstract, c.8.lines 53-55).

As per **claims 42, 47 and 52**, Freeman discloses all of the limitations of claim 41, upon which claim 42 depends. Freeman further discloses:

the morphing data includes morphing codes indicating a part of speech of the stored words (C.13.line 54-c.14.line 37).

As per claims 43, 48 and 53, Freeman discloses all of the limitations of claim 42, upon which claim 43 depends. Freeman further discloses:

the selected word is morphed in a manner dependent upon the part of speech of the stored word (c.13.lines 54-c.14.lines 20, especially c.14.lines 13-20).

As per **claims 44, 49 and 54**, Freeman discloses all of the limitations of claim 40, upon which claim 44 depends. Freeman further discloses:

the selected word is morphed in a manner dependent upon the part of speech of the stored word (ibid).

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As per **claims 76, 77, and 78**, Freeman discloses morphs are automatically displayed for further selection upon selection of a displayed word (C.8.line 55-C.9.line 22)

### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M. Spooner whose telephone number is 571/272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571/272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ims 1/14/06

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